Avoiding AI from Scratch: Why Life Sciences Shouldn't Start from the Ground Up
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Welcome to the third installment in our series exploring the impact of artificial intelligence on life sciences. Today, we tackle a strategic question: Is building AI from scratch the best path forward? In an industry where compliance, speed, and precision are required the answer is often no. Instead, leveraging commercially available AI platforms and solutions built specifically for life sciences can help companies avoid costly pitfalls and accelerate their path to meaningful innovation.

Why Starting from Scratch Isn't Always the Best Approach

Creating AI solutions entirely in-house is a complex and resource-intensive endeavor that requires extensive knowledge, time, and commitment to detail—resources that many organizations could better allocate toward research and product development. In life sciences, where data needs to be both accurate and traceable, even minor errors in an AI model or dataset can have significant regulatory and clinical implications. Rather than building new AI systems and data management architectures from the ground up, life sciences companies can achieve faster, safer, and more reliable results by leveraging established AI platforms.

Leveraging Out-of-the-Box Compliance and Data Integrity

AI platforms designed specifically for life sciences should take into consideration both technical rigor and regulatory compliance in equal measures. These platforms should include data validation, traceability, and governance tools that align with regulatory expectations, making it easier to meet the standards for drug safety, efficacy, and effectiveness.

Moreover, commercial AI platforms for life sciences should be designed to handle multi-modal data, which is essential in today's complex healthcare landscape. Clinical trials, patient records, and lab results each come with distinct data challenges—ranging from data cleanliness to provenance and structure. AI solutions specifically designed an built for Life Science streamline the

integration of these data types, allowing life sciences organizations to focus on applying AI insights rather than building the infrastructure to manage them.

Ensuring Ethical Standards and Reducing Bias

Another essential benefit of adopting established AI platforms is their built-in mechanisms for managing bias, which is critical in life sciences. AI solutions specifically built for Life Sciences often include fairness checks, diverse data sets, and validation protocols designed to prevent biases that could impact patient outcomes or lead to regulatory setbacks. These platforms offer explainability and traceability, helping organizations meet ethical and regulatory standards more seamlessly than if they attempted to develop these safeguards independently.

Commercial AI platforms also provide transparency into the data used, as well as the algorithms and decision-making processes, allowing life sciences companies to build trust with regulators, clinicians, and patients. In this way, AI platforms act not only as tools for data analysis but as frameworks that embed ethical and regulatory best practices directly into the technology, providing peace of mind and ensuring that AI applications support fair, responsible, and compliant decision-making.

Building the Future with Proven AI Solutions

At Acumen, we believe that life sciences companies should focus on leveraging innovation—not creating it from scratch. By adopting commercially available AI platforms designed for their unique challenges, organizations can reduce risk, streamline compliance, and accelerate time-to-market. These platforms bring together the power of AI and the precision required in healthcare, allowing life sciences companies to achieve their mission of delivering better patient outcomes more efficiently.

Let's Keep the Conversation Going

How is your organization navigating the "build vs. buy" decision in AI? Are you finding that pre-built solutions meet your needs, or do you see gaps that custom-built AI might fill? We'd love to hear from you—let's discuss how we can collectively advance trustworthy and efficient AI applications in life sciences.